Corsica Stickney Curriculum Map

Subject: Pre-Algebra Grade: 8th Unit 1 Module 1: Real Numbers Lessons: 1.1,1.2,1.3	Teacher: Mrs. Jacque Boyle Duration: August 2019
Summary of unit: Students will be able to use real numbers, exponents, and scientific notation to solve real-world problems.	

Stage 1 – Desired Results

Standards	Essential Questions:
8.NS.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number. 8.NS.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g. π2) 8.EE.2 Use square root and cube root symbols to represent solutions to equations of the form x2 = p and x3 = p, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that √ 2 is irrational.	How do you rewrite rational numbers and decimals, take square roots and cube roots, and approximate irrational numbers? How can you describe relationships between sets of real numbers? How do you order a set of real numbers?

Language objective	Mathematical practices	Integrate mathematical practices
Students will show and explain how to rewrite rational numbers and decimals, take square roots and cube roots, and approximate irrational numbers. Students will explain how to describe relationships between sets of real numbers.	MP. 6 Attend to precision	1.1 MP.6 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to attend to precision. Students learn to express rational numbers accurately and precisely in both fractional and decimal forms, and learn to translate from one form to the other. They also learn how to precisely represent and communicate ideas about irrational numbers, square roots, and cube roots.

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Students will show and describe how to order a set of real numbers.	MP.7 Look for and make use of structure. MP.4 Model with mathematics.	1.2 MP. 7 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to discern structure to connect and communicate mathematical ideas. Students use a Venn diagram to structure relationships between sets of numbers. They connect and communicate mathematical ideas when they make logical statements about the sets and describe which set best describes numbers applied to real-life situations. 1.3 MP. 4 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to model relationships using multiple representations, including diagrams, graphs, and language as appropriate. Students use multiple representations when they use number lines to estimate the locations of and to order rational and irrational numbers given as symbols.
Vocabulary		**Differentiation**
cube root irrational numbers perfect cube perfect square principal square root	rational number real numbers repeating decimal square root terminating decimal	Students who need extra help receive help from teacher one on one for independent working time. If appropriate, they complete worksheets or tests in an alternate setting.
Stage 2 – Assessment Evidence		
Performance Tasks: Homework quizzes, worksheet, Tests.	Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests	
Stage 3 – Learning Plan		
• Learning Activities: procedures/topics • Reading and discussing lesson with class as lecture time. • Giving students examples to be completed in class. Most times using the Think, Pair, and Share to keep students active in their learning individually and together. • Students take notes and use notes to complete homework assignments. • Sometimes activities used to present things in multiple ways or for extra practice on struggling concepts.		

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Lesson Descriptions Lesson 1.1 Rational and Irrational Numbers Lesson 1.2 Sets of Real Numbers Lesson 1.3 Ordering Real Numbers
Relevance and Reflection Understanding the basis of numbers and how they relate is helpful to know what typed of numbers are used for different aspects of problems in life. Most numbers dealt with tend to be irrational but understanding where they are rational or just whole numbers is important. This month's lessons went well as students worked hard to see the types of numbers used and understand the terminology. I would probably do a few more quiz or practice on terminology to refresh throughout the year so they remember for the end of the year. Maybe used in bell ringers or warmup problems.

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Subject: Pre-Algebra Grade: 8th Unit 1 Module 2: Exponents and Scientific notation 2.1, 2.2, 2.3, 2.4 Unit 2 Module 3: Proportional Relationships 3.1	Teacher: Mrs. Jacque Boyle Duration: September 2019
Summary of unit: Students will be able to use real numbers, exponents, and scientific notation to solve real-world problems.	
Stage 1 – Desired Results	
Standards 8.EE.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions 8.EE.3 Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. 8.EE.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology. 8.EE.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation y = mx for a line through the origin and the equation y = mx + b for a line intercepting the vertical axis at b. 8.F.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two	Essential Questions: • How can you develop and use the properties of integer exponents? • How can you use scientific notation to express very large quantities? • How can you use scientific notation to express very small quantities? • How do you add, subtract, multiply, and divide using scientific notation? • How can you use tables, graphs, and equations to represent proportional situations?

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(x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	

Language objective	Mathematical practices	Integrate mathematical practices
Students will write an explanation of how to develop and use the properties of integer exponents. Students will explain how to use scientific notation to express very large quantities. Students will explain how to use scientific notation to express very small quantities. Students will demonstrate how to add, subtract, multiply, and divide using scientific notation.	MP.8 Look for and express regularity in repeated reasoning. MP.4 Model with mathematics. MP.2 Reason abstractly and quantitatively.	MP.8 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to notice if calculations are repeated. Students learn to recognize how repeated division defines the use of negative exponents. They then use repeated multiplication and division to discover properties of exponents and find shortcuts for simplifying expressions. MP.4 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to solve problems arising in everyday life, society, and the workplace. Students use scientific notation to write very large numbers to express facts about the natural world, and they see how this notation is used by scientists in reporting scientific information. MP.2 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to represent a situation symbolically. Students write very small numbers in two forms of symbolic representation: standard form and scientific notation. Students also use mathematical language to express the processes they use to convert from one representation to the other.

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	MP.1 Make sense of problems and persevere in solving them.	MP.1 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to make sense of problems and persevere in solving them. Example 2 uses a four-step problem-solving process to determine the speed of the sun as it moves in the Milky Way. Students analyze the information, formulate a plan, solve the problem, and justify and evaluate the solution.
	MP.4 Model with mathematics.	MP.4 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to use tables and equations to model a relationship between corresponding real-world proportional values. Then students use graphs to visualize the proportional relationship and to create tables to model the relationship. In this way, students are able to use multiple representations to model real-world situations.
Vocabulary		**Differentiation**
power rational number real numbers	scientific notation whole number proportional relationship constant of proportionality	Students who need extra help receive help from teacher one on one for independent working time. If appropriate, they complete worksheets or tests in an alternate setting.
Stage 2 – Assessment Evidence		
Performance Tasks: Homework quizzes, worksheet, Tests.	Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests	
Stage 3 – Learning Plan		
• Learning Activities: procedures/topics • Reading and discussing lesson with class as lecture time. • Giving students examples to be completed in class. Most times using the Think, Pair, and Share to keep students active in their learning individually and together. • Students take notes and use notes to complete homework assignments.		

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- Sometimes activities used to present things in multiple ways or for extra practice on struggling concepts.

Lesson Descriptions

LESSON 2.1 Integer Exponents
LESSON 2.2 Scientific Notation with Positive Powers of 10
LESSON 2.3 Scientific Notation with Negative Powers of 10
LESSON 2.4 Operations with Scientific Notation
LESSON 3.1 Representing Proportional Relationships

Relevance and Reflection

It is important to know the ideas of exponential numbers and where those would be seen. They also will use the understanding of Scientific notation in future science classes so the basis of knowing very huge numbers or very small numbers is important. All the real life examples we've used through the lesson have shown the relevancy. Then, moving to the next unit on relationships of proportions it is important for students to know how to relate to separate quantities and see how they relate as ratios, equations, or graphically.

For the lessons covered this month I believe it went well. They could use more help with the reminders of operations with words. More daily practice leading up to this or repetition on that aspect would help continue to know what operation to use. The common phrases used to see a trend in data and make an equation is also needing more practice.

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Subject: Pre-Algebra Grade: 8th Unit 2 Module 3: Representing Proportional Relationships 3.2, 3.3, Module 4 Nonproportional Relationships 4.1, 4.2, 4.3, 4.4 Module 5 Writing Linear Equations 5.1, 5.2, 5.3 Module 6 Functions 6.1, 6.2, 6.3	Teacher: Mrs. Jacque Boyle Duration: October 2019
Summary of unit: Students will be able to use proportional relationships, nonproportional relationships, write linear equations, and understand functions to solve problems in real-world problems.	
Stage 1 – Desired Results	
Standards 8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways 8.EE.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation y = mx for a line through the origin and the equation y = mx + b for a line intercepting the vertical axis at b. 8.F.1 Understand that a function is a rule that assigns to each input exactly one output. 8.F.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). 8.F.3 Interpret the equation y = mx + b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear 8.F.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change	Essential Questions: How can you use tables, graphs, and equations to represent proportional situations? How do you find a rate of change or a slope? How do you interpret the unit rate as slope? How can you use tables, graphs, and equations to represent linear nonproportional situations? How can you determine the slope and the y-intercept of a line? How can you graph a line using the slope and y-intercept? How can you distinguish between proportional and nonproportional situations? How do you write an equation to model a linear relationship given a graph or a description? How do you write an equation to model a linear relationship given a table? How can you contrast linear and nonlinear sets of bivariate data? How can you identify and represent functions? What are some characteristics that you can use to describe functions?

and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. 8.SP.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association. 8.SP.2 … For scatter plots that suggest a linear association, informally fit a straight line, … 8.SP.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept.	How can you use tables, graphs, and equations to compare functions?

Language objective	**Mathematical practices**	**Integrate mathematical practices**
Students will use tables, graphs, and equations to represent proportional situations. Students will find a rate of change or a slope. Students will interpret the unit rate as slope. Students will use tables, graphs, and equations to represent linear nonproportional situations. Students will determine the slope and the y-intercept of a line.	MP.4 Model with mathematics.	3.1MP.4 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to use tables and equations to model a relationship between corresponding real-world proportional values. Then students use graphs to visualize the proportional relationship and to create tables to model the relationship. In this way, students are able to use multiple representations to model real-world situations. 3.3 Students find and analyze the unit rate in input and output tables. Then students use graphs to find the slope of a line. In this way, students are led to make the

Students will graph a line using the slope and y-intercept. Students will distinguish between proportional and nonproportional situations Students will write an equation to model a linear relationship given a graph or a description. Students will write an equation to model a linear relationship given a table. Students will contrast linear and nonlinear sets of bivariate data. Students will identify and represent functions. Students will use characteristics to describe functions. Students will use tables, graphs, and equations to compare functions.	MP.7 Look for and make use of structure.	connection between unit rate and slope. 4.1Students use equations to represent a relationship between corresponding values. Then students make tables to represent some values in the relationship. Finally, students use graphs to visualize the relationship 5.2 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to apply mathematics to problems arising in everyday life, society, and the workplace. Students apply what they know about linear relationships to problems arising from an experiment measuring changes in temperature, measuring the flow of water, and examining the cost of a cell-phone plan. They relate details of everyday relationships to the formal summary of a linear equation in mathematical terms. 6.1This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to represent relationships using diagrams, tables, graphs, and symbols. Students learn to identify and represent a function using a set of ordered pairs, a mapping diagram, words, a table, an equation, and a graph. These multiple representations are used to communicate the idea of a function. 3.2 MP.7 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to discern a structure. Students find and

		analyze the rates of changes in input and output tables. Then students use graphs to visualize constant rates of change and to describe a constant rate of change as the slope of a line. In this way, students analyze input-output tables and graphs to make the connection between rate of change and slope. 4.2 In this lesson, students discern the relationship between slope and rate of change. In Example 1, students use a table to find the constant rate of change and the initial value and relate these to a salesperson's commission and minimum weekly salary 4.3 MP.6 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to communicate precisely, including communicating through the use of symbols and graphs. In Example 2, students begin with a real-world situation represented by a linear equation, they find the y-intercept and slope, and then they represent the equation with a graph. 4.4 Students analyze relationships represented by words, tables, equations, and graphs and must describe the relationships with terms such as proportional, nonproportional, linear, and nonlinear. 5.3 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to precisely communicate mathematical ideas and reasoning. Students use tables and graphs and equations to represent linear and nonlinear relationships. Students use these
	MP.6 Attend to precision	

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		multiple representations to compare and contrast linear and nonlinear relationships and to communicate their understanding. 6.2 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to precisely communicate mathematical ideas and reasoning. Students model real-world and mathematical functions by creating a table of values and then graphing the ordered pairs on a coordinate grid. They determine whether the functions are proportional or nonproportional, and linear or nonlinear.
	MP.2 Reason abstractly and quantitatively.	5.1 MP.2 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to represent a situation symbolically. Students read values from a graph and create a new representation of the linear relationship in the form of an equation
	MP.3 Construct viable arguments and critique the reasoning of others.	6.3 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to analyze mathematical relationships to connect and communicate mathematical ideas. Students compare linear relationships whether they are modeled with a verbal description, tables, equations, or graphs. By comparing linear relationships, students analyze the mathematical relationships of different real-world settings.
Vocabulary		**Differentiation**

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constant of proportionality proportional relationship rate of change slope unit rate Linear equation slope-intercept form of an equation	y-intercept bivariate data nonlinear relationship function input output linear equation linear function	Students who need extra help receive help from teacher one on one for independent working time. If appropriate, they complete worksheets or tests in an alternate setting.

Stage 2 – Assessment Evidence

Performance Tasks: Homework quizzes, worksheet, Tests.	Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests

Stage 3 – Learning Plan

- Learning Activities: procedures/topics
- Reading and discussing lesson with class as lecture time.
- Giving students examples to be completed in class. Most times using the Think, Pair, and Share to keep students active in their learning individually and together.
- Students take notes and use notes to complete homework assignments.
- Sometimes activities used to present things in multiple ways or for extra practice on struggling concepts.

Lesson Descriptions

LESSON 3.1 Representing Proportional Relationships
LESSON 3.2 Rate of Change and Slope
LESSON 3.3 Interpreting the Unit Rate as Slope
LESSON 4.1 Representing Linear Nonproportional Relationships
LESSON 4.2 Determining Slope and y-intercept
LESSON 4.3 Graphing Linear Nonproportional Relationships using Slope and y-intercept
LESSON 4.4 Proportional and Nonproportional Situations
LESSON 5.1 Writing Linear Equations from Situations and Graphs
LESSON 5.2 Writing Linear Equations from a Table
LESSON 5.3 Linear Relationships and Bivariate Data
LESSON 6.1 Identifying and Representing Functions
LESSON 6.2 Describing Functions
LESSON 6.3 Comparing Functions

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Relevance and Reflection
The relevance of seeing trends proportions or non proportions are helpful to understand things that have an increasing trend or decreasing trend. It would help in making daily decisions sometimes. Constant changes or not constant could also sway a decisions on buying an item or working more hours. Representing material graphically helps visually through an equation helps with future math skills and helps critical thinking. Understanding Functions help with what aspect would stand alone (independent variable) and what aspect depends on another (dependent variable) also helpful with future classes. This was a month filled with material on trends and beefy algebra. It would have been nice to spend another week on these final lessons. I would spread this out a little bit further the next time I teach it. Extra examples and a tangen on solving for a variable with 2 variables in an equation before getting to Module 8 would help at this point.

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Subject: Pre-Algebra Grade: 8th Unit 2 Module 6: Functions 6.4 Unit 3 Module7: Solving Linear Equations 7.1, 7.2, 7.3, 7.4	Teacher: Mrs. Jacque Boyle Duration: November 2019
Summary of unit: Students will be able to use proportional relationships, nonproportional relationships, write linear equations, and understand functions to solve problems in real-world problems. Students will be able to use equations with the variable on both sides to solve real-world problems.	
Stage 1 – Desired Results	
Standards 8.F.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. 8.EE.7 Solve linear equations in one variable. 8.EE.7a Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form x = a, a = a, or a = b results (where a and b are different numbers). 8.EE.7b Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.	Essential Questions: How can you describe a relationship given a graph and sketch a graph given a description? How can you represent and solve equations with the variable on both sides? How can you solve equations with rational number coefficients and constants? How do you use the Distributive Property to solve equations? How can you give examples of equations with a given number of solutions?

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Language objective	Mathematical practices	Integrate mathematical practices
Students will explain how to describe a relationship given a graph and sketch a graph given a description. Students will represent and solve equations with the variable on both sides. Students will solve equations with rational number coefficients and constants. Students will use the Distributive Property to solve equations. Students will give examples of equations with a given number of solutions.	MP.4 Model with mathematics. MP.6 Attend to precision.	6.4 MP.4 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to model with mathematics. Students apply mathematics to describe a relationship arising in everyday life. They use a given graph or sketch a graph to model a complicated real-world situation, draw conclusions, and reflect on whether the results make sense. The graph helps them to interpret the situation in ways that the information written in the problem does not permit. 7.1 MP.4 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to apply mathematics to problems arising in everyday life, society, and the workplace. Students use information about two related real-world situations to write and solve an equation with the same variable on both sides of the equation. Students must also describe a real-world situation that could be modeled by a given equation. 7.2 MP.6 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to communicate precisely. Students write equations involving fractions or decimals to represent real-world situations and solve real-world problems. They also create real-world situations that can be modeled by equations involving fractions or decimals.

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	MP.1 Make sense of problems and persevere in solving them. MP.8 Look for and express regularity in repeated reasoning.	7.3 MP.1 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to make sense of problems and persevere in solving them. 7.4 MP.8 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to look for and express regularity in repeated reasoning. Students should see patterns in the processes of simplifying and building equations. They should notice that linear equations in one variable that have no solutions always result in a false statement after the x term has been eliminated. Using this pattern, students use the work-backward strategy to reinstate an x value on both sides of a false statement involving two numbers. The result is a linear equation that has no solutions.
Vocabulary		**Differentiation**
		Students who need extra help receive help from teacher one on one for independent working time. If appropriate, they complete worksheets or tests in an alternate setting.
Stage 2 – Assessment Evidence		
Performance Tasks: Homework quizzes, worksheet, Tests.		Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests
Stage 3 – Learning Plan		
• Learning Activities: procedures/topics • Reading and discussing lesson with class as lecture time. • Giving students examples to be completed in class. Most times using the Think, Pair, and Share to keep students active in their learning individually and together. • Students take notes and use notes to complete homework assignments. • Sometimes activities used to present things in multiple ways or for extra practice on struggling concepts.		

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Lesson Descriptions LESSON 6.4 Analyzing Graphs LESSON 7.1 Equations with the Variable on Both Sides LESSON 7.2 Equations with Rational Numbers LESSON 7.3 Equations with the Distributive Property LESSON 7.4 Equations with Many Solutions or No Solution
Relevance and Reflection The analyzing graphs is helpful in many areas of life, at a doctor's office, researching topics of interest. It is helpful to know how to interpret a graph and look at the labels to understand what is being displayed. Solving for equations is helpful for understanding how an answer can be found and checked. There is a process to follow and many jobs require a process to follow. Very relevant for all future plans as a student. I believe that this lesson needed extra time and more help as it gets rushed through as students would like to just do everything in their heads and not show their work. I would require much more time and practice on this subject because it later assumed to be understood and work to be shown.

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Subject: Pre-Algebra Grade: 8th Unit 3 Module 8: Solve Systems of Equations 8.1, 8.2, 8.3, 8.4, 8.5	Teacher: Mrs. Jacque Boyle Duration: December 2019
Summary of unit: Students will be able to use equations with the variable on both sides to solve real-world problems.	
Stage 1 – Desired Results	
Standards 8.EE.8 Analyze and solve pairs of simultaneous linear equations. 8.EE.8a Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. 8.EE.8b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. 8.EE.8c Solve real-world and mathematical problems leading to two linear equations in two variables.	Essential Questions: How can you solve a system of equations by graphing? How do you use substitution to solve a system of linear equations? How do you solve a system of linear equations by adding or subtracting? How do you solve a system of linear equations by multiplying? How do you solve a system with no solutions or infinitely many solutions?

Language objective	**Mathematical practices**	**Integrate mathematical practices**
Students will solve a system of equations by graphing. Students will use substitution to solve a system of linear equations. Students will solve a system of linear equations by adding or subtracting.	MP.3 Construct viable arguments and critique the reasoning of others	8.1 MP.3 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to reason logically about what it means for a system of two linear equations in two variables to have a unique solution or infinitely many solutions, both graphically and algebraically. Students also have the opportunity to make conjectures about the conditions under which a system of three

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Students will solve a system of linear equations by multiplying. Students will solve a system with no solutions or infinitely many solutions.	MP.6 Attend to precision. MP.1 Make sense of problems and persevere in solving them	linear equations in two variables will have a unique solution. 8.2 MP.6 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to attend to precision. Students examine graphs of systems of equations to understand why the graphical method of solving a system is not always able to provide a precise solution. They learn that a graph of a system of equations can provide an estimate of the coordinates of the solution. Students also learn to use the algebraic method of substitution to find the precise solution to a system of equations. 8.3 MP.1 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to make sense of problems and persevere in solving them. Students solve systems of equations using either addition or subtraction to eliminate one of the variables. Then students ask themselves if the solution they found makes sense. They use what they learned about graphing systems of equations to check the accuracy or reasonableness of the solution they found. They also learn to translate real-world problems into systems of equations and solve them. 8.4 MP.1 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to make sense of problems and persevere in solving them. Example 3 uses a four-step problemsolving process. Students analyze the information, formulate

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		a plan, solve the problem, and justify and evaluate the solution. 8.5 MP.2This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to reason abstractly and quantitatively. Upon reaching a final algebraic solution of a system of equations, students must reason abstractly to determine whether there is only one solution, no solution, or infinitely many solutions to the system. They must also reason abstractly to analyze the graphs of a system of equations and draw conclusions about the solution(s) of the system.
	MP.2 Reason abstractly and quantitatively.	
Vocabulary		**Differentiation**
solution of a system of equations system of equations	substitution method elimination method	Students who need extra help receive help from teacher one on one for independent working time. If appropriate, they complete worksheets or tests in an alternate setting.
Stage 2 – Assessment Evidence		
Performance Tasks: Homework quizzes, worksheet, Tests.		Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests
Stage 3 – Learning Plan		

- Learning Activities: procedures/topics
- Reading and discussing lesson with class as lecture time.
- Giving students examples to be completed in class. Most times using the Think, Pair, and Share to keep students active in their learning individually and together.
- Students take notes and use notes to complete homework assignments.
- Sometimes activities used to present things in multiple ways or for extra practice on struggling concepts.

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Lesson Descriptions
LESSON 8.1 Solving Systems of Linear Equations by Graphing LESSON 8.2 Solving Systems by Substitution LESSON 8.3 Solving Systems by Elimination LESSON 8.4 Solving Systems by Elimination with Multiplication LESSON 8.5 Solving Special Systems
Relevance and Reflection
Understanding where to equations equal are relevant for the finding maximizing profit or minimizing cost problems. It is helpful for business also helpful for seeing where you start to save money if you invest more at the beginning rather than taking the cheaper route at the beginning. I believe this module as well requires extra time and help as students think they can just guess and check. Where using algebra is much more precise an builds confidence having a set process.

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Subject: Pre-Algebra Grade: 8th Unit 4 Module 9: Transformations and Congruence 9.1, 9.2, 9.3, 9.4, 9.5 Module 10: Transformations and Similarity 10.1, 10.2, 10.3	Teacher: Mrs. Jacque Boyle Duration: January 2020
Summary of unit: Students will be able to use transformations with congruence and similarity to solve real-world problems.	
Stage 1 – Desired Results	
Standards 8.G.1 Verify experimentally the properties of rotations, reflections, and translations: a Lines are taken to lines, and line segments to line segments of the same length. b Angles are taken to angles of the same measure. c Parallel lines are taken to parallel lines. 8.G.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them. 8.G.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. 8.G.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	Essential Questions: How do you describe the properties of translation and their effect on the congruence and orientation of figures? How do you describe the properties of reflection and their effect on the congruence and orientation of figures? How do you describe the properties of rotation and their effect on the congruence and orientation of figures? How can you describe the effect of a translation, rotation, or reflection on coordinates using an algebraic representation? What is the connection between transformations and figures that have the same shape and size? How do you describe the properties of dilations? How can you describe the effect of a dilation on coordinates using an algebraic representation? What is the connection between transformations and the orientations of similar figures?

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Language objective	Mathematical practices	Integrate mathematical practices
Students will describe the properties of translation and their effect on the congruence and orientation of figures. Students will describe the properties of reflection and their effect on the congruence and orientation of figures. Students will describe the properties of rotation and their effect on the congruence and orientation of figures. Students will describe the effect of a translation, rotation, or reflection on coordinates using an algebraic representation. Students will understand the connection between transformations and figures that have the same shape and size. Students will describe the properties of dilations. Students will describe the effect of a dilation on coordinates using an algebraic representation. Students will describe the connection between transformations and the orientations of similar figures.	MP.6 Attend to precision.	9.1 MP.6 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to communicate precisely. Students translate a figure on a coordinate grid following a given translation rule. Then, students measure the lengths of the sides and the degrees of the angles to show that the corresponding sides and angles are congruent. Finally, students make a conjecture about the preservation of the size and shape of a figure. 9.5 MP.6 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to attend to precision. Students pay close attention to the coordinates of the vertices of a figure in order to apply a given sequence of transformations and graph the resulting image. Each transformation must be carefully and precisely applied to obtain the desired outcome. Students also must pay close attention to the coordinates of the vertices of a figure and its images when determining the sequence of transformations that result in a figure being transformed into a particular image. 10.3 MP.6 This lesson provides an opportunity to address this Mathematical Practice standard that calls for students to attend to precision. It is important that students pay close attention to the coordinates of the vertices as they apply transformations and graph the results. Each transformation

		must be applied carefully and precisely to obtain the desired outcome. For example, the magnitude, direction, and center of a rotation must be stated precisely. The scale factor of a dilation must be calculated precisely to have the algebraic rule be accurate.
	MP.5 Use appropriate tools strategically	9.2 MP.5 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to use tools such as models, rulers, and pencil and paper to analyze relationships. Students use the results of the Explore Activities to make a conjecture that reflections preserve the size and shape of a figure. They find the measures of the angles and side lengths of the image and it's preimage and use them to justify their conjecture. 10.1 MP.5 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to consider available tools when solving a problem. Students use tables and a diagram to model a relationship between a figure and its dilation. Then students use graphs on a coordinate plane to generalize the language of dilations and the scale factor. Finally, students use mathematical language to describe, contrast, and compare dilations with other transformations.
	MP.2 Reason abstractly and quantitatively	9.3 MP.2 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to make sense of relationships in a problem. Students use coordinate grids to visualize a relationship between a preimage and a rotation that

		results in an image. Then students use words to describe the relationship between the preimage and the image following a rotation.
	MP.3 Construct viable arguments and critique the reasoning of others.	9.4 MP.3 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to use logic to analyze situations. Students use the rules for translations, reflections, and rotations to find the vertices of the image using an algebraic representation instead of graphs. Also, students use an algebraic rule to create a graph of an image, then use the graph to describe the transformation.
	MP.4 Model with mathematics.	10.2 MP.4 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to use models such as diagrams, tables, graphs, and formulas. Students change graphic representations into tables, back into a graph of a dilation, and then use words to describe the image. They use algebraic methods to find the new coordinates for a dilation and graph it. They then use these representations to solve problems involving blueprints. Finally, they generalize the effect of transformations in words.
Vocabulary		**Differentiation**
Image Preimage transformation, translation line of reflection reflection center of rotation	rotation congruent center of dilation dilation enlargement reduction scale factor similar	Students who need extra help receive help from teacher one on one for independent working time. If appropriate, they complete worksheets or tests in an alternate setting.
Stage 2 – Assessment Evidence		
Performance Tasks: Homework quizzes, worksheet, Tests.	Unit Pre-Assessment:	

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	Assign ready-made or customized practice tests to prepare students for high-stakes tests

Stage 3 – Learning Plan

- Learning Activities: procedures/topics
- Reading and discussing lesson with class as lecture time.
- Giving students examples to be completed in class. Most times using the Think, Pair, and Share to keep students active in their learning individually and together.
- Students take notes and use notes to complete homework assignments.
- Sometimes activities used to present things in multiple ways or for extra practice on struggling concepts.

Lesson Descriptions

LESSON 9.1 Properties of Translations
LESSON 9.2 Properties of Reflections
LESSON 9.3 Properties of Rotations
LESSON 9.4 Algebraic Representations of Transformations
LESSON 9.5 Congruent Figures
LESSON 10.1 Properties of Dilations
LESSON 10.2 Algebraic Representations of Dilations
LESSON 10.3 Similar Figures

Relevance and Reflection

Geometric transformations and similarity are very helpful in design and construction as it require blueprint and models often. Being able to visually move objects is helpful and can be used in many areas of study.

These went pretty well as long as students took the time to use their resources and understand which transformation meant what. However timing was good on this area.

Corsica Stickney Curriculum Map

Subject: Pre-Algebra Grade: 8th Unit 5 Module 11: Angle Relationships in Parallel Lines and Triangles 11.1, 11.2, 11.3 Module 12: The Pythagorean Theorem 12.1, 12.2, 12.3 Module 13: Volume 13.1, 13.2, 13.3	Teacher: Mrs. Jacque Boyle Duration: February 2020
Summary of unit: Students will be able to use angle relationships in parallel lines and triangles, the Pythagorean Theorem, and Volume to solve real-world problems.	
Stage 1 – Desired Results	
Standards 8.EE.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane … . 8.EE.7 Solve linear equations in one variable. 8.EE.7b Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms. 8.G.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so. 8.G.6 Explain a proof of the Pythagorean Theorem and its converse. 8.G.7 Apply the Pythagorean Theorem to determine unknown side lengths in right	Essential Questions: What can you conclude about the angles formed by parallel lines that are cut by a transversal? What can you conclude about the measures of the angles of a triangle? How can you determine when two triangles are similar? How can you prove the Pythagorean Theorem and use it to solve problems? How can you test the converse of the Pythagorean Theorem and use it to solve problems? How can you use the Pythagorean Theorem to find the distance between two points on a coordinate plane? How do you find the volume of a cylinder? How do you find the volume of a cone? How do you find the volume of a sphere?

triangles in real-world and mathematical problems in two and three dimensions. 8.G.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system. 8.G.9 Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	

Language objective	**Mathematical practices**	**Integrate mathematical practices**
Students will make conclusions about parallel lines that are cut by a transversal. Students will make conclusions about the measures of the angles of a triangle. Students will determine when two triangles are similar. Students will prove the Pythagorean Theorem and use it to solve problems. Students will test the converse of the Pythagorean Theorem and use it to solve problems. Students will use the Pythagorean Theorem to find the distance between two points on a coordinate plane. Students will find the volume of cylinder. Students will find the volume of a cone.	MP.6 Attend to precision. MP.5 Use appropriate tools strategically	11.1 MP.6 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to communicate mathematical ideas and arguments using precise mathematical language. Students learn to recognize the relationships among the angles formed when two parallel lines intersect a transversal. Students learn the precise terms used to characterize these angles and describe their mathematical relationship. 13.3 MP.6 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to communicate mathematics precisely. Students explore the relationship between the volumes of cylinders, cones, and spheres. Students learn to express the volumes through formulas and to explain the differences and similarities in the coefficients and variables in the formulas 11.2 MP.5 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to use

Students will find the volume of sphere.		appropriate tools strategically to solve problems. Students use a paper triangle to model the relationship between the measures of the interior angles of a triangle. They can then use paper and pencil to solve equations to find the measures of the interior angles of a triangle or the measure of an exterior angle of a triangle. 12.1 MP.5 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to use appropriate tools strategically to solve problems. Students use paper and pencil to create models to prove the Pythagorean Theorem. They go on to solve problems using the Pythagorean Theorem with the aid of number sense to recognize reasonable answers and calculators to determine squares and square roots. They then find the diagonal of a box, an exercise which will be aided by examining a real box
	MP.4 Model with mathematics.	11.3 MP.4 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to apply mathematics to problems arising in everyday life, society, and the workplace. Students use the properties of similar triangles to write proportions and determine the height of a real-world object that would be difficult to measure directly. 13.2 MP.4 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to model with mathematics. Students use models to explore the relationship

		between the volume of a cone and a cylinder with congruent bases and heights. They use this activity to write a rule for the volume of a cone.
	MP.7 Look for and make use of structure.	12.2 MP.7 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to look for structure. Students determine whether triangle side lengths fulfill the Pythagorean Theorem. In Example 2 and in many of the exercises, students determine whether triangles in real-world situations are right triangles.
	MP.2 Reason abstractly and quantitatively	12.3 MP.2 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to reason abstractly and quantitatively. Students connect the Pythagorean Theorem with finding the distance between two points in the coordinate plane and then derive the Distance Formula.
	MP.3 Construct viable arguments and critique the reasoning of others.	13.1 MP.3 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to construct viable arguments by making conjectures and building a logical progression of statements. Students explore ways to find the volume of a cylinder, working from descriptions or diagrams. Students then represent the volume in symbolic form as an equation.
Vocabulary		**Differentiation**
alternate exterior angles alternate interior angles corresponding angles same-side interior angles transversal exterior angle interior angle	similar figures similar hypotenuse legs cylinder cone	Students who need extra help receive help from teacher one on one for independent working time. If appropriate, they complete worksheets or tests in an alternate setting.

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remote interior angle	radius of a sphere sphere	

Stage 2 – Assessment Evidence

Performance Tasks: Homework quizzes, worksheet, Tests.	Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests

Stage 3 – Learning Plan

- Learning Activities: procedures/topics
- Reading and discussing lesson with class as lecture time.
- Giving students examples to be completed in class. Most times using the Think, Pair, and Share to keep students active in their learning individually and together.
- Students take notes and use notes to complete homework assignments.
- Sometimes activities used to present things in multiple ways or for extra practice on struggling concepts.

Lesson Descriptions

LESSON 11.1 Parallel Lines Cut by a Transversal
LESSON 11.2 Angle Theorems for Triangles
LESSON 11.3 Angle-Angle Similarity
LESSON 12.1 The Pythagorean Theorem
LESSON 12.2 Converse of the Pythagorean Theorem
LESSON 12.3 Distance Between Two Points
LESSON 13.1 Volume of Cylinders
LESSON 13.2 Volume of Cones
LESSON 13.3 Volume of Spheres

Relevance and Reflection

Parallel lines are seen in many areas of our world. Students were able to give many examples of where they see them and how they are used. Students then are able to see the relationships about them cut by an intersection or transversal. Triangles are often used in construction and a right triangles relationship with the sides can be used often, when making any right corner. The three dimensional shapes are also as containers seen every day. They can know the contents capability by finding volume.

These areas also went well also as long as they used their resources remembered formulas and showed work and not just entered what the calculator gave them. They did well just missing days of school can hurt others very quickly trying to get caught up. There was a lot of terminology used that caused headaches for those not in attendance.

Corsica Stickney Curriculum Map

Subject: Pre-Algebra Grade: 8th Unit 6 Module 14: Scatter Plots 14.1, 14.2 Module 15 Two-Way Tables 15.1, 15.2	Teacher: Mrs. Jacque Boyle Duration: March 2020
Summary of unit: Students will be able to use scatter plots and two-way tables to solve real-world problems.	
Stage 1 – Desired Results	
Standards 8.SP.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association. 8.SP.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line. 8.SP.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. 8.SP.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.	Essential Questions: How can you construct and interpret scatter plots? How can you use a trend line to make a prediction from a scatter plot? How can you construct and interpret two-way frequency tables? How can categorical data be organized and analyzed?

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Language objective	Mathematical practices	Integrate mathematical practices
Students will construct and interpret scatter plots. Students will use a trend line to make a prediction from a scatter plot. Students will construct and interpret two-way frequency tables. Students will organize and analyze categorical data.	MP.7 Look for and make use of structure.	14.1 MP.7 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to look closely to discern a pattern or structure. Students will look for patterns in scatter plots of bivariate data. They use a scatter plot to interpret clusters of data and identify any outliers. They also use scatter plots to identify how sets of data are associated.
	MP.6 Attend to precision.	14.2 MP.6 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to communicate precisely to others. Students draw a trend line for a scatter plot of bivariate data with a positive linear association. Then students represent the trend line using an algebraic equation and use the equation to predict a value between data points that they already know or outside the data they know. In this way, students have used multiple representations, including symbols, graphs, and language, to communicate mathematical ideas precisely. 15.1 MP.6 This lesson provides an opportunity to address this Mathematical Practices standard, which calls for students to attend to precision. When constructing two-way tables, students need to be accurate with their computations and precise in their recording of the data. The row elements and column elements must be correctly placed in order for the totals to be calculated

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		correctly. Relative frequencies will often not be whole percents, so students must choose to represent them with an appropriate degree of precision. 15.2 MP.8 This lesson provides an opportunity to address this Mathematical Practices standard, which calls for students to look for and express regularity in repeated reasoning. As students repeat calculations for each cell in a two-way relative frequency table, they become increasingly proficient in the process of calculating relative frequency. In addition, they generalize the process so they can apply the same calculations and reasoning to any categorical data set organized in a two-way frequency table.
MP.8 Look for and express regularity in repeated reasoning		
Vocabulary		**Differentiation**
Association Cluster Outlier scatter plot trend line Frequency relative frequency two-way table	conditional relative frequency joint relative frequency marginal relative frequency two-way frequency table two-way relative frequency table	Students who need extra help receive help from teacher one on one for independent working time. If appropriate, they complete worksheets or tests in an alternate setting.
Stage 2 – Assessment Evidence		
Performance Tasks: Homework quizzes, worksheet, Tests.	Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests	
Stage 3 – Learning Plan		
• Learning Activities: procedures/topics • Reading and discussing lesson with class as lecture time. • Giving students examples to be completed in class. Most times using the Think, Pair, and Share to keep students active in their learning individually and together. • Students take notes and use notes to complete homework assignments. • Sometimes activities used to present things in multiple ways or for extra practice on struggling concepts.		

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Lesson Descriptions
LESSON 14.1 Scatter Plots and Association LESSON 14.2 Trend Lines and Predictions LESSON 15.1 Two-Way Frequency Tables LESSON 15.2 Two-Way Relative Frequency Tables
Relevance and Reflection
Scatter plots, trend lines and predictions are very important in a many businesses. Gas stations, doctors, farmers, and teachers all depend on trends to help make decisions to set prices, prescribe medicine, know what seed to plant, and what lessons need more work. It is important for them to understand the basis of trends to make predictions with different variables in life. Also two-way frequency tables would show that data through tables and percents just a different representation. This month most of this lesson was done at home because of COVID-19. Students worked hard on trying their best for the most part. There was some difficulty to get the hiccups out, but students tried their best. I don't think they obtained as much as they would have in the classroom.

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Subject: Pre-Algebra Grade: 8th Review Unit 3 Module 7: 7.1, 7.2, 7.3, 7.4 Module 8: 8.1, 8.2, 8.3, 8.4	Teacher: Mrs. Jacque Boyle Duration: April 2020
Summary of unit: Students will be able to use equations with the variable on both sides to solve real-world problems. Students will be able to use equations with the variable on both sides to solve real-world problems.	
Stage 1 – Desired Results	
Standards 8.EE.7 Solve linear equations in one variable. 8.EE.7a Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form x = a, a = a, or a = b results (where a and b are different numbers). 8.EE.7b Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms. 8.EE.8 Analyze and solve pairs of simultaneous linear equations. 8.EE.8a Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. 8.EE.8b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection.	Essential Questions: How can you represent and solve equations with the variable on both sides? How can you solve equations with rational number coefficients and constants? How do you use the Distributive Property to solve equations? How can you give examples of equations with a given number of solutions? How can you solve a system of equations by graphing? How do you use substitution to solve a system of linear equations? How do you solve a system of linear equations by adding or subtracting? How do you solve a system of linear equations by multiplying?

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8.EE.8c Solve real-world and mathematical problems leading to two linear equations in two variables.	

Language objective	**Mathematical practices**	**Integrate mathematical practices**
Students will represent and solve equations with the variable on both sides. Students will solve equations with rational number coefficients and constants. Students will use the Distributive Property to solve equations. Students will give examples of equations with a given number of solutions. Students will solve a system of equations by graphing. Students will use substitution to solve a system of linear equations. Students will solve a system of linear equations by adding or subtracting. Students will solve a system of linear equations by multiplying.	MP.4 Model with mathematics. MP.6 Attend to precision.	7.1 MP.4 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to apply mathematics to problems arising in everyday life, society, and the workplace. Students use information about two related real-world situations to write and solve an equation with the same variable on both sides of the equation. Students must also describe a real-world situation that could be modeled by a given equation. 7.2 MP.6 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to communicate precisely. Students write equations involving fractions or decimals to represent real-world situations and solve real-world problems. They also create real-world situations that can be modeled by equations involving fractions or decimals. 8.2 MP.6 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to attend to precision. Students examine graphs of systems of equations to understand why the graphical method of solving a system is not always able to provide a precise solution. They learn that a graph of

		a system of equations can provide an estimate of the coordinates of the solution. Students also learn to use the algebraic method of substitution to find the precise solution to a system of equations.
	MP.1 Make sense of problems and persevere in solving them.	7.3 MP.1 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to make sense of problems and persevere in solving them. 8.3 MP.1 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to make sense of problems and persevere in solving them. Students solve systems of equations using either addition or subtraction to eliminate one of the variables. Then students ask themselves if the solution they found makes sense. They use what they learned about graphing systems of equations to check the accuracy or reasonableness of the solution they found. They also learn to translate real-world problems into systems of equations and solve them. 8.4 MP.1 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to make sense of problems and persevere in solving them. Example 3 uses a four-step problemsolving process. Students analyze the information, formulate a plan, solve the problem, and justify and evaluate the solution.
	MP.8 Look for and express regularity in repeated reasoning.	7.4 MP.8 This lesson provides an opportunity to address this Mathematical Practice standard. It

		calls for students to look for and express regularity in repeated reasoning. Students should see patterns in the processes of simplifying and building equations. They should notice that linear equations in one variable that have no solutions always result in a false statement after the x term has been eliminated. Using this pattern, students use the work-backward strategy to reinstate an x value on both sides of a false statement involving two numbers. The result is a linear equation that has no solutions. 8.1 MP.3 This lesson provides an opportunity to address this Mathematical Practices standard. It calls for students to reason logically about what it means for a system of two linear equations in two variables to have a unique solution or infinitely many solutions, both graphically and algebraically. Students also have the opportunity to make conjectures about the conditions under which a system of three linear equations in two variables will have a unique solution.
	MP.3 Construct viable arguments and critique the reasoning of others.	
Vocabulary		**Differentiation**
solution of a system of equations system of equations	substitution method elimination method	Students who need extra help receive help from teacher one on one for independent working time. If appropriate, they complete worksheets or tests in an alternate setting.
Stage 2 – Assessment Evidence		
Performance Tasks: Homework quizzes, worksheet, Tests.		Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests
Stage 3 – Learning Plan		

Corsica Stickney Curriculum Map

- Learning Activities: procedures/topics
- Reading and discussing lesson with class as lecture time.
- Giving students examples to be completed in class. Most times using the Think, Pair, and Share to keep students active in their learning individually and together.
- Students take notes and use notes to complete homework assignments.
- Sometimes activities used to present things in multiple ways or for extra practice on struggling concepts.

Lesson Descriptions

LESSON 7.1 Equations with the Variable on Both Sides
LESSON 7.2 Equations with Rational Numbers
LESSON 7.3 Equations with the Distributive Property
LESSON 7.4 Equations with Many Solutions or No Solution
LESSON 8.1 Solving Systems of Linear Equations by Graphing
LESSON 8.2 Solving Systems by Substitution
LESSON 8.3 Solving Systems by Elimination
LESSON 8.4 Solving Systems by Elimination with Multiplication

Relevance and Reflection

This was just a review over these concepts as solving equations and systems of equations are needed later in Algebra classes I thought since they were home they could use their online interactive book to go through the lessons again to feel more confident in solving. Again for those who did this at home benefited but some chose not to try hard and it may affect them later.

Corsica Stickney Curriculum Map

Subject: Pre-Algebra Grade: 8th Review Packets: Overview of all standards throughout the year.	Teacher: Mrs. Jacque Boyle Duration: May 2020
Summary of unit: Students are compiling all their knowledge in a set of packets for the two weeks of school left in May.	

Stage 1 – Desired Results

Standards All standards covered throughout the year.	Essential Questions: What are the essential areas of true growth and areas of needed help? How serious can we use this evidence for what they have learned as they are ready to be done?

Language objective	Mathematical practices	Integrate mathematical practices

Vocabulary		Differentiation
		Students who need extra help receive help from teacher one on one for independent working time. If appropriate, they complete worksheets or tests in an alternate setting.

Stage 2 – Assessment Evidence

Performance Tasks: Homework quizzes, worksheet, Tests.	Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests

Stage 3 – Learning Plan

- Learning Activities: procedures/topics
- Reading and discussing lesson with class as lecture time.
- Giving students examples to be completed in class. Most times using the Think, Pair, and Share to keep students active in their learning individually and together.
- Students take notes and use notes to complete homework assignments.
- Sometimes activities used to present things in multiple ways or for extra practice on struggling concepts.

Corsica Stickney Curriculum Map

Lesson Descriptions
Compilation of all lessons seen throughout the year.
Relevance and Reflection
I believe it was nice to just have them go through and see what they knew through a couple of packets encompassing all the standards learned throughout the year as there was no testing. It was nothing new for the last couple weeks and that had to give them some ease for all they have had to endure for the last quarter of school. I believe it wasn't a true representation of what they knew as some were checking out long before these last couple weeks but some did take it seriously and have learned something throughout the school year.